#### UNITED STATES ENVIRONMENTAL PROTECTION AGENCY



REGION 4
SAM NUNN
ATLANTA FEDERAL CENTER
61 FORSYTH STREET
ATLANTA GEORGIA 30303-8960

December 2, 2014

Mr. J. Brandon Bruner, P.E. District Environmental Management Engineer Florida Department of Transportation 1074 Highway 90 Chipley, Florida 32428

SUBJECT:

Draft Environmental Impact Statement for the SR 87 Connector

Santa Rosa County, Florida

CEQ No. 20140301

Dear Mr. Bruner:

The U.S. Environmental Protection Agency (EPA) has reviewed the referenced Draft Environmental Impact Statement (EIS) in accordance with its responsibilities under Section 309 of the Clean Air Act and Section 102(2)(C) of the National Environmental Policy Act (NEPA). The Florida Department of Transportation (FDOT) and the Federal Highway Administration (FHWA) are proposing a new roadway project that will directly link SR 87 South with SR 87 North in the vicinity of the City of Milton in Santa Rosa County, Florida.

The proposed roadway includes the construction of a new divided four lane, semi-controlled access facility from the US 90/SR 87S intersection to just north of the convergence of SR 87N and SR 89. The new roadway is proposed to be built in two separate phases. Initially, it will include an interim two lane facility and, as demand increases, the road would be expanded to four lanes if needed to ultimately match the four lane sections at the existing SR 87S and SR 87N facilities. All right-of-way required for the four lane facility would be acquired during the first phase of the project.

The Draft EIS includes Build Alternatives 1 and 2. Alternative 1 is approximately 6.5 miles in length and extends north from the US90/SR 87S intersection crossing the Blackwater River in the proximity of the existing eastern power easement crossing. Once across the river, it runs parallel or adjacent to the power easement, then connects with SR 87N just north of the convergence of SR 87N and SR 89, utilizing the Oakland Drive right-of-way. Alternative 2 is approximately 8.2 miles in length and also extends north from the US90/SR 87S intersection crossing the Blackwater River in the proximity of the existing eastern power easement crossing. Once across the river, it continues slightly north of Alternative 1, and runs adjacent to the Clear Creek environmental lands, where it proceeds west to connect with SR 87N in the proximity of the northern split of SR 87N and SR 89. The No Build alternative which does not meet the purpose and need provides a baseline to compare and measure the effects of the Build Alternatives.

Both Build Alternatives are proposed as a four lane, restricted access, divided highway with two sets of twin two lane bridges over the Blackwater River and the Blackwater Heritage State Trail, east of Milton and over Clear Creek, south of the Whiting Field Naval Air Station. The proposed roadway will also provide a 12 foot multi-use path on the west side of the roadway from us 90 to just north of the Blackwater Heritage State Trail.

The EPA has been involved with the proposed SR 87 Connector project since 2009 through the Florida Environmental Transportation Decision Making (ETDM) process. EPA reviewed and provided comments on six alternatives as an ETDM Programming Screen Review in December 2009 and January 2010. As a result of this review and ETAT agency comments and concerns, four alternatives (Alternatives 3, 4, 5, and 6) were eliminated from further analysis and consideration.

Based on our review, EPA has environmental concerns regarding potential direct, indirect, and cumulative impacts of the project and is providing comments on social and economic impacts, air quality, noise impacts and mitigation, wetlands, water quality, contamination, and floodplains which occur in the project area. Additional comments regarding cumulative impacts are also provided. See enclosed comments.

In order to meet the requirements of the Clean Water Act Section 404(b)(1) Guidelines, FDOT must demonstrate that the discharge of dredged or fill materials into jurisdictional waters of the United States is unavoidable and that the least environmentally-damaging practicable alternative (LEDPA) that will fulfill the basic project purpose has been selected. The EPA generally attempts to recommend an alternative (or alternatives) that might be appropriate to meet the requirements of the National Environmental Policy Act (NEPA) and the 404(b)(1) Guidelines. Since there appears to be little difference between Alternative 1 and Alternative 2 with regard to overall potential environmental impacts, based upon information provided in the Draft EIS, EPA has no preference at this time.

The EPA has identified some environmental impacts that should be avoided in order to provide adequate protection of the environment. These impacts are detailed in the enclosed comments. The EPA rates the overall project EC-2 (enclosed is a summary of definitions for EPA ratings). We have concerns that the alternatives will have impacts on the environment that should be avoided and minimized. Corrective measures may require changes to the alternatives or application of additional mitigation measures that can reduce the environmental impact.

As indicated in the enclosed detailed comments, the EPA is requesting that FHWA and FDOT provide clarifications, supplementary information, and/or explanations of certain conclusions found in the Draft EIS. The preferred alternative should be identified in the Final EIS, along with mitigation details to address the potential impacts of the preferred alternative.

We appreciate the opportunity to review the proposed action and comment on this Draft EIS. If you have any questions or would like to discuss the EPA's comments, please contact Madolyn Sanchez at (404)562-9644.

Sincerely,

Heinz J. Mueller, Chief NEPA Program Office

# Enclosures

cc: Federal Highway Administration – Florida Division
U.S. Army Corps of Engineers – Panama City Regulatory Office
U.S. Fish and Wildlife Service – Panama City Office
National Marine Fisheries Service – Southeast Regional Office
Florida Department of Environmental Protection
Florida Fish and Wildlife Conservation Commission

# EPA Region 4 Comments SR 87 Connector Santa Rosa County, Florida Draft Environmental Impact Statement (DEIS) CEQ No. 20140301

# **Overview**

The SR 87 Connector project is proposed to provide additional capacity, emergency evacuation, and to improve regional connectivity by providing a more direct route from areas of high growth in northern Santa Rosa County to I-10 and to areas further to the south. This roadway facility will link SR 87S to SR 87N and will serve as an alternative to the existing shared facility of SR 87 and SR 90, which is a constrained facility that is currently operating at a failing level of service (LOS) F. The roadway facility will also improve access within the Whiting Field area and provide relief for the currently physically constrained US 90 bridge over the Blackwater River.

EPA understands that proper growth and land use planning is critical to economic growth, developing healthy communities, and protecting the environment all at the same time. It also recognizes that the primary responsibility for land use decisions is at the local level. Therefore, suggestions and recommendations are offered that should assist state agencies, federal agencies, and communities to balance the transportation needs with the project impacts to reach a sound decision.

# **Alternatives Considered**

The initial corridor evaluation and analysis included six project corridors. The Draft EIS provides a general summary of the alternatives considered for the proposed project in Section 3.1.4. Various factors were weighted and scored which resulted in a ranking of the six corridors, as illustrated in Figure 3.3. Corridors 1, 2, and 3 scored the highest based upon the ranking factors. Corridors 4, 5, and 6 would traverse protected lands owned by the Northwest Florida Water Management District (NWFWMD). Multiple state and federal ETAT members identified that these alternatives had substantial impacts to water quality, wetlands, wildlife and habitat, historical sites, recreational areas, floodplain and parks. Corridors 4, 5, and 6 were deemed fatally flawed and unfeasible by FHWA. Further coordination with FWHA also resulted in the removal of Corridor 3 from further consideration. Based on all corridor analyses, Corridors 1 and 2 remained as the viable build alternatives.

A further weighted evaluation was conducted for Alternatives 1 and 2 involving a combination of both qualitative and quantitative values resulting in an overall score. Table 3.2 of the Draft EIS illustrates, describes and evaluates the features associated with the evaluation parameters. The result from this analysis indicated that Alternative 1 obtained the highest total score and the No Build Alternative was the least favorable option.

Alternative 1 scored better than Alternative 2 in each of the primary criteria (mainly due to the fact that it has less noise impacts, would better alleviate congestion on US 90 and would be less costly). The Draft EIS states that a final recommendation for the preferred alternative will be made only after the public hearing transcript and comments on the preliminary engineering report and environmental document have been evaluated.

Alternative 1 is approximately 6.5 miles in length and extends north from the US90/SR 87S intersection crossing the Blackwater River in the proximity of the existing eastern power easement crossing. Once across the river, it runs parallel or adjacent to the power easement, then connects with SR 87N just north of the convergence of SR 87N and SR 89, utilizing the Oakland Drive right-of-way. Alternative 2 is approximately 8.2 miles in length and also extends north from the US90/SR 87S intersection crossing the Blackwater River in the proximity of the existing eastern power easement crossing. Once across the river, it continues slightly north of Alternative 1, and runs adjacent to the Clear Creek environmental lands, where it proceeds west to connect with SR 87N in the proximity of the northern split of SR 87N and SR 89.

# Social and Economic and Environmental Justice

The Draft EIS assesses the possible social and economic impacts of the project alternatives. This assessment includes social impacts, economic impacts, land use, aesthetics, relocation (residential and business), mobility, and environmental justice.

The DEIS includes a good assessment of social and economic impacts of the proposed project alternatives. The project provides social benefits such as improved capacity, mobility and safety, as well as improved regional connectivity. Alternatives 1 and 2 provide a bypass around Milton and a more direct route to SR 87N. In addition, they also intersect SR 87N in a moderately developed area, potentially serving existing residents and businesses more efficiently. The roadway will service the economic development of the areas as well. Overall, the project does not result in substantial social, economic, or environmental justice impacts. The project requires very minor residential relocations or displacements and does not result in a disproportional impact to environmental justice areas (minority and low-income populations).

The project is expected to result in one or two residential displacements, with no community services impacted. Both viable alternatives generally have the same social impacts, with Alternative 2 impacting one additional residential and two additional agricultural parcels. Social impacts generally arise from right-of-way requirements associated with a proposed project. The majority of the study area does not include dense residential areas, or areas with extensive housing.

Changes in land use consist of the conversion of land to transportation from single family residential, industrial and agricultural land uses. Among the affected parcels for this projects, the majority are assigned land use categories of agriculture/silviculture and industrial. Future land use includes some single family residential areas in the vicinity where the alternatives intersect SR 87N and near the proposed Munson Road intersection. Future land use for the area

surrounding the southern portion of the proposed roadway (both alternatives) will remain industrial, or will convert from silviculture to industrial.

Executive Order 12898 "Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations" (February 11, 1994) and its accompanying memorandum's primary purpose is to ensure that "each Federal agency shall make achieving environmental justice (EJ) part of its mission by identifying and addressing, as appropriate, disproportionately high and adverse human health or environmental effects of its programs, policies, and activities on minority populations and low-income populations..."

EPA assessed whether FDOT and FHWA analyzed the environmental effects of the proposed action on minority communities and low-income communities within the project corridor, the City of Milton and Santa Rosa County. Based on EPA's review, FHWA and FDOT primarily used Census data to analyze the demographics and effects of the proposed project. With regard to environmental justice issues, both alternatives generally have the same impacts, none of which are significant. Based upon the Draft EIS, seven of the 36 impacted census blocks include minority percentages greater than the county average, and two include minority percentages greater than the state average. None of the census block groups had a significant low income population and there are no likely disproportional impacts to citizens below the poverty line. The elimination of the southern alternatives in the early corridor analysis resulted in the avoidance of Census areas within Santa Rosa County that had the highest minority percentages with some of the lowest incomes per household as well.

Citizen concerns regarding right-of-way, residential and business relocations, and economic impacts should be addressed through the public involvement process and taken into consideration when selecting a final alternative.

# Recreation and Parkland and Section 4(f)

Both project alternatives cross the Blackwater Heritage State Trail (BHST), which is part of the Florida System of Greenways and is the most western rail trail. The Draft EIS states that to minimize any impact, the viable project alternatives over the BHST will include the construction of a grade-separated overpass that will traverse the 100-foot wide trail corridor right-of-way. No bridge pilings or other bridge infrastructure will be installed within the trail corridor. FHWA determined that Section 4(f) does not apply based on the proposed design.

Alternative 2 traverses lands that are planned for purchase as part of the Clear Creek/Whiting Field Florida Forever Board of Trustees Project. After coordination with the county and a review of the planned purchase properties, Alternative 2 was updated to be located on the extreme western border of this property and/or within the county owned parcels.

The SR1 Historic Trail is located at the very southern end of the Alternatives at the intersection of US 90 and SR 87S. The trail runs parallel to US 90. A review by both the State Historic Preservation Office (SHPO) and FHWA determined that there was no acquisition of

land required nor are there any adverse effects to the property. Therefore, the project does not result in Section 4(f) involvement.

EPA has no substantial comments regarding Section 4(f) resources and recreational and parkland properties. Continued coordination with appropriate agencies should take place to insure that there are no adverse impacts to these types of resources as a result of the project.

# **Air Quality**

The proposed project will provide additional roadway capacity along a congested US 90/SR 87 corridor. The SR 87Connector is projected to carry approximately 11,000 daily vehicles in 2015; 15,000 in 2025; and 20,000 in 2035. These volumes will provide some relief to traffic congestion along US 90. The roadway is anticipated to operate at a level of service (LOS) C or better.

The proposed project is located in Santa Rosa County, Florida, an area that is currently designated attainment for all of the National Ambient Air Quality Standards under the criteria provided in the Clean Air Act. Therefore, EPA has no substantial comments regarding NAAQS conformity. In addition project level analyses were conducted for carbon monoxide (CO) and the results from the screening model indicate that the highest CO one-hour and eight-hour levels are not predicted to meet or exceed the NAAQS for CO with either the No Build or Build Alternatives.

# **Noise**

Noise Methodology

Overall, the Draft EIS provided good background information for the public reviewer. However, some additional information is requested for the Final EIS.

Resultant Noise: The FHWA Noise Abatement Criteria (NAC) is 67 dBA (residences) and 72 dBA (businesses). We agree that residences exposed to the 66 dBA level approaching the 67 dBA criterion should be considered for mitigation. NAC is reported as the "Leq" or "equivalent noise level" over some timeframe, usually one hour ("Leq(1)").

Incremental Elevation Noise: Although we understand it may be FDOT policy, EPA does not agree that +15 dBA is the best threshold for significant project incremental noise elevation. Instead, we find that +10 dBA better identifies the threshold because it represents a doubling of noise at any ambient noise (baseline) level.

Noise Impacts

As reported in Section 5.4.3 and on Table 5.5 of the Draft EIS, for Alternative 1, for the Design Year 2035 Build condition, noise levels are predicted to approach or exceed the 66 dBA NAC at 11 noise sensitive receptor sites. In addition, a substantial noise increase (when the existing noise level is predicted to be exceed by 15 dBA or more) occurred at seven receptor

sites of which four also had predicted levels over the 66 dBA NAC. Since this build alternative involves noise impacts, consideration of noise abatement is warranted.

For Alternative 2, for the Design Year 2035 Build condition, noise levels are predicted to approach or exceed the 66 dBA NAC at 20 noise sensitive receptor sites. In addition, a substantial noise increase (when the existing noise level is predicted to be exceed by 15 dBA or more) occurred at seven receptor sites of which four also had predicted levels over the 66 dBA NAC. Since this build alternative involves noise impacts, consideration of noise abatement is warranted.

# Noise Abatement and Mitigation

The Draft EIS addressed the feasibility and reasonableness of noise abatement measures. The Draft EIS indicates that based on the result of noise abatement criteria, barriers are not warranted anywhere along Alternative 1. Barriers were determined not to be cost reasonable based on the inability of the barriers to provide the minimum FHWA/FDOT guideline of \$42,000 threshold per benefitted receptor. Along Alternative 2, construction of a noise barrier may be reasonable and feasible for noise sensitive sites located on the western limit near the Harvest Point Subdivision. Two out of the 11 scenarios do result in a benefit of over \$42,000 per sites (Table 5.6). The Draft EIS states that commitments regarding the exact abatement measure locations, heights, and type will be made during the final design phase and at a time before the construction advertisement is approved.

EPA recommends that the Final EIS include a commitment for noise mitigation if warranted by the selected alternative. The Final EIS should include a description of the types of noise mitigation measures that will be utilized for noise impacts attributable to the preferred alternative, if necessary. Using more than one form of incremental mitigation should be considered and discussed in the Final EIS.

The following are some types of additional noise mitigation measures that could be considered:

# **Property Acquisition**

The criteria used by FDOT for acquiring property for roadway projects should be disclosed as FDOT considers this measure in the project design phase. Would residences (or businesses) need to be actually be located within the proposed ROW before they could be acquired, or just nearby with significant project noise exposure?

#### Pavement Types

Recent research on pavement types has shown that reduction in tire noise is possible depending on the type of pavement used (e.g., rubberized pavement). Have such innovative types of pavement been considered?

#### Earthen Berms

Depending on the amount of fill available from highway cut-and-fill work (perhaps none for Florida projects), the use of earthen berms might be feasible since they would be less expensive than metal noise barriers and therefore could be used where conventional barriers are not cost-effective. They would also be more natural and scenic to the landscape, and could be vegetated.

#### Truck Noise

What percentage of the project traffic will consist of trucks and can this be reduced? Although slow speed limits for cars may not be practical to reduce noise, slower speed limits for trucks may be more reasonable and should be discussed. This could be important since tire and engine noise from one truck equals the noise generated by many cars.

# Combined Methods

Although individually a particular mitigative method may not reduce noise levels by -5 dBA or more, several incremental methods could cumulatively reduce levels substantially.

## Construction Noise Impacts

The Draft EIS does not include the analyses and/or listing of construction noise sensitive sites and EPA recommends the adherence to construction practices to control noise and vibration impacts. Although construction noise is temporary, Best Management Practices (BMPs) including the use of screens (hush houses) around stationary equipment and mufflers for earthmoving equipment would help attenuate noise at its source. The Final EIS should estimate the time of construction (months) to help document the magnitude of construction noise.

# Wetlands

The proposed roadway has the potential for direct and indirect and cumulative effects to wetlands. Alternative 1 traverses more wetland areas than Alternative 2. However, there is little difference in the total amount of direct wetland acreage impact between the two build alternatives. There are approximately 57 acres of wetlands within the Alternative 1 alignment and approximately 56 acres of wetlands within the Alternative 2 alignment. Approximately 35 acres of wetlands within Alternative 1 and 31 acres of wetlands within Alternative 2 are proposed for direct impact. Approximately 22 acres are potentially proposed for shading impacts in both alternatives. There are approximately an additional 140 and 134 acres of indirect and cumulative impacts for Alternatives 1 and 2, respectively.

Wetlands impacts have been avoided and minimized to the maximum extent practicable through the use of stormwater collection methods, maintenance of pre and post hydrologic flow between wetlands and streams, and by bridging the high quality sensitive wetlands associated with the Blackwater River, Clear Creek, and reticulated flatwoods salamander critical habitat. The original wetland impact acreage was calculated to be 129 acres of potential wetland impact. Based on alignment revisions, the current potential direct wetland impact for Alternative 1 is  $\pm$  57 acres and Alternative 2 is  $\pm$  53 acres. EPA strongly supports bridging the entire floodplain,

wetland, and critical habitat area associated with the Blackwater River, Clear Creek, and the reticulated flatwoods salamander. This commitment should be included in the Final EIS and Record of Decision.

The Draft EIS clearly documents wetlands acreage that is directly impacted by the two proposed project alignments and the Uniform Mitigation Assessment Methodology (UMAM) scores for each of the Build Alternatives. The State of Florida utilizes the UMAM to determine the amount of mitigation required to offset wetland and surface water impacts. USACE accepts UMAM as a suitable qualitative wetland assessment methodology. Tables 5.10 and 5.11 provides the UMAM summary in a matrix format which summarizes the wetland impact analyses for both Alternatives 1 and 2. Each matrix includes the polygon name, wetland classifications (based on Florida Natural Areas Inventory (FNAI) and Florida Land Use, Cover, and Forms Classification System (FLUCCS), acreage, polygon score, and functional loss for Alternatives 1 and 2, respectively. The impacts and functional UMAM loss are also summarized in Table 5.12.

The U.S. Army Corps of Engineers (USACE) and the Northwest Florida Water Management District (NWFWMD) will claim jurisdiction over most of the identified wetlands. As a result, a jurisdictional determination for wetlands will be needed during the project design phase. An individual Clean Water Act Section 404 permit will be required from the USACE, along with an Environmental Resource Permit required from the Florida Department of Environmental Protection (FDEP). EPA provides review and comment on individual Clean Water Act Section 404 permits.

The Draft EIS document discusses wetlands avoidance and minimization. Many of the avoidance measures were undertaken during the corridor analyses and modification of alignments for the two build alternatives. The document goes into detailed minimization efforts for bridges and stormwater treatment for impacts to Blackwater River, Clear Creek, and associated floodplains. It also discusses minimization efforts relating to construction methodology, hydrological connections, and threatened and endangered plant and animal species.

Mitigation will be required for direct, as well as some indirect wetlands impacts. The Draft EIS states that FDOT is committed to the mitigation of all wetlands impacted as a result of the project. It also states that compensatory mitigation for this project will be completed through the use of mitigation banks and any other mitigation options that satisfy state and federal requirements. The following language is included in the document: "At this point in the project development, FDOT is not prepared to state how impacts to wetlands will be mitigated due to the varying types of resources that could be impacted. The degree, type, and location of mitigation that will be required will not be determined until permitting requirements for the recommended alternative are evaluated. The FDOT will reserve use of statute approved mitigation, mitigation banks located near the proposed project, or property donations once the efficiency and value of the mitigation options have been calculated." It goes on to discuss the purchase of mitigation

credits and the option of utilizing one mitigation bank (Pensacola Bay Mitigation Bank (PBMB)). The PBMB only has approximately 25 credits available for purchase at the time of the Draft EIS preparation and the project will require at least 50 credits.

Wetlands mitigation planning should not be deferred until the permitting phase, and the Final EIS should include detailed information regarding a wetlands mitigation plan. As part of the LEDPA decision, FDOT and the USACE should ensure that adequate compensatory mitigation is available for the selected alternative and after avoidance and minimization has been accomplished.

## **Water Quality**

The proposed project has the potential to significantly impact surface water as a result of stormwater runoff into surface water bodies. The existing drainage within the project study area primarily function by overland sheet flow which discharges into wetlands adjacent to Clear Creek and Blackwater River. The majority of the land within the study area is undeveloped and used for agricultural purposes. There are eight existing drainage basins along each alternative. The stormwater runoff from this project outfalls into the Blackwater River, the Pensacola Bay and ultimately into the Gulf of Mexico. The existing water quality is of high-quality and primarily unaffected by manmade features since most of the study area is undeveloped or agricultural land. The north and south ends of the study area (existing state roads) provide treatment of stormwater runoff for water quality in retention ponds.

The Blackwater River is attributed to a wide floodplain and regulatory floodway at the proposed roadway and bridge crossing. Clear Creek is a tributary to the Blackwater River and has a floodplain associated with the creek; however, Clear Creek is not a regulatory floodway. Blackwater River drains to Blackwater Bay and is part of the Pensacola Bay watershed; these are Surface Water Improvement and Management (SWIM) priority waters of the NWFWMD. The Blackwater River is listed as an Outstanding Florida Water (OFW). OFWs are provided the highest level of protection under the 62-302.700 Florida Administrative Code (F.A.C.). Degradation of water quality in an OFW is prohibited except under certain circumstances and pollutant discharges must not lower existing ambient water quality. Both alternatives traverse through areas which drain to an OFW. There is little overall difference between the alternatives and resulting impacts to water quality.

The Draft EIS states that the proposed stormwater facility design will be in accordance with local and state regulatory requirements. Due to the proposed impact to an OFW, there is a requirement that an additional 50% treatment volume be provided in these areas. The stormwater management facilities were preliminarily designed to include this additional 50%, even in areas that do not directly discharge to Blackwater River. The Draft EIS mentions the use of storm sewer pipe and roadside ditch conveyance systems along with the use of stormwater ponds for the collection and treatment of stormwater. Detailed information regarding pond sites

is included in a Pond Siting Report. However, the body of the Draft EIS document does not list or illustrate where potential stormwater pond sites are proposed for each Alternative. This information should be included in the Final EIS.

The Final EIS should identify the specific BMPs to be applied to attain appropriate reductions in sediment loads and what additional monitoring will be conducted to achieve pollutant reductions. Mitigation measures related to protection of water quality should be tailored depending on the condition of the specific water resource as well as the severity of any potential impacts. All appropriate steps should be taken to address potential impacts to water quality within streams and wetlands. Proper control of storm water runoff during construction will be critical. Construction activities have the potential to introduce sediments in adjacent waterbodies that could exacerbate problems relative to increasing sediment oxygen demand which affects dissolved oxygen levels. Monitoring commitments should be included to ensure that water quality and in-stream habitat are fully protected. One of the challenges for the reduction of sediment loading from construction sites is effective compliance monitoring of all requirements specified in the permit and timely enforcement against construction sites not found to be in compliance with the permit. Storm water controls should be monitored periodically for the duration of construction and maintained to help ensure success (e.g., silt fences emptied and hay bales replaced).

To further assist in the long-term reduction of pollutant loadings to surface water resources in the project area, EPA recommends that storm water runoff from the proposed roadway be collected and treated before being discharged to surface waters. In other areas, typical BMPs, including the use of staked hay bales, silt fences, mulching and reseeding, and use of buffer zones along water bodies, are appropriate. These types of commitments should be included in the Final EIS, if appropriate.

EPA recommends careful consideration of all water quality impacts, including whether the preferred alignment has first avoided, then minimized impacts to water quality, and then whether there are feasible mitigation measures that will be utilized to rectify any unavoidable impacts to affected waterbodies. The Final EIS should identify whether the preferred alternative is the least environmentally damaging practicable alternative that satisfies the Purpose and Need per Clean Water Act Section 404(b)(1) Guidelines (Title 40 of the Code of Federal Regulation, Section 230).

# Contamination

The project has the potential to also impact groundwater in the project area. The sand-and-gravel aquifer system is the primary source of large underground supply of fresh water in Santa Rosa County. The porosity and permeability of the sand-and-gravel aquifer results in contaminated surface water being a primary concern for the aquifer. Potential contamination can be introduced via migration through the porous soils into the aquifer and down gradient to Blackwater River or Clear Creek. The potential impacts to groundwater was discussed in the Contamination section of the Draft EIS.

A total of twelve (12) contaminated sites were identified as being potential sources of contamination at the proposed alignment for both alternatives. The Draft EIS includes information on these twelve potential contamination sites and their ranking (LOW, MEDIUM, or HIGH). A weighted rating system (score of 1-3) was used to assess the potential for contamination impact from the alternatives. Based upon the results, Alternative 1 was given a score of 21 and Alternative 2 was given a score of 14. Figure 5.4 in the document provides a summary of the evaluation of the two project alternatives.

The impacts to contamination sites should be considered in the selection of the preferred alternative. Neither alternative results in a significant risk from contaminated sites due to the undeveloped agricultural nature of most of the roadway corridor; however, selection of Alternative 2 would result in less exposure to contamination risk. EPA recommends that the Final EIS include information regarding contamination sites associated with the preferred alternative and what type of additional site assessment will be needed. It should also include what type, if any; site remediation may be needed in order for construction activities to proceed. EPA also recommends that FDOT coordinate with the appropriate regulatory agencies regarding the resolution of problems associated with contamination or remedial action activities.

# **Floodplains**

The Draft EIS indicates that the proposed alternatives cross floodplains in multiple locations, including the regulatory floodplain of Blackwater River. Flood heights associated with the bridges is minimal due to the fact that the floodplain has transverse encroachments and the Blackwater River Bridge spans the entire floodway. The proposed bridge will be designed having a length and vertical clearance to provide hydraulic conveyance of storm events affecting the Blackwater River in addition to providing vertical and horizontal clearances required for small recreational vessel navigation. Based upon information in the Draft EIS, the project is not considered to have significant floodplain encroachments. Floodplain impacts were evaluated and documented in a Location Hydraulics Report.

The Location Hydraulics Report summarizes the overall encroachments the projects is expected to have on floodplains. The document states "The construction of the drainage structure(s) proposed for this project will cause changes in flood state and flood limits. These changes will not result in any significant adverse impacts on the natural and beneficial floodplain values of any significant changes in flood risk or damage. These changes are currently being reviewed by the appropriate regulatory authorizes who have concurred with the determination that there will be no significant impacts. There will not be significant change in the potential for interruption, or termination, of emergency service or emergency evacuation routes. Therefore, it has been determined that this encroachment is not significant."

The Draft EIS reports that floodplain compensation will be provided by excavating (dredging) a portion of "uplands" just upstream of the proposed Blackwater River Bridge. This area will serve as a locale for additional flooding along the river bank and will assist with rise in

base flood elevations at the proposed highway facility. EPA recommends that the Final EIS include information regarding floodplains associated with the preferred alternative. The Final EIS should also include the mitigation commitments for unavoidable floodplain impacts.

#### Wildlife and Habitat

EPA recognizes that the project has the potential to affect wildlife habitat and protected and/or endangered species, including the gulf sturgeon and the reticulated flatwoods salamander. The Draft EIS provides information regarding the types and locations of wildlife and habitat that could be impacted by the project alternatives. EPA defers to the U.S. Fish and Wildlife Service (USFWS) and Florida Fish and Wildlife Conservation Commission (FFWCC) to consider and to address those potential adverse effects associated with the proposed project.

The Draft EIS states that an Endangered Species Biological Assessment Report (ESBAR) (dated September 5, 2012) and Biological Assessment (dated March 2013) have been completed for the SR 87 project. In conducting these assessments, informal and formal consultation with the USFWS was initiated. The Formal Section 7 consultation process for the reticulated flatwoods salamander and gulf sturgeon was completed per the Services Biological Opinion issued on December 20, 2013. EPA recommends that FHWA and FDOT continue coordination with the appropriate resource agencies. The Final EIS should describe how the preferred alternative avoids, minimizes, or mitigates potential impacts to wildlife habitat and species.

# **Indirect and Cumulative Impacts**

The indirect effects of a project on land use and the subsequent environmental effects can be both temporally and geographically more extensive than the direct impacts of transportation projects. The analysis of these changes and the subsequent environmental impacts is important to understand the total impact of the federal action on the natural, cultural and socioeconomic environment. Consideration of indirect and cumulative impacts requires the assessment of an area's ability to absorb additional development, the loss of businesses or residences, and if the watershed can absorb the loss of additional wetlands.

The Draft EIS lacks a quantitative and qualitative analysis of cumulative impacts on resources other than wetlands. The document states that secondary and cumulative impacts of the project are expected to range from minimal to more substantial depending upon the resource. EPA recommends that indirect and cumulative impacts be further assessed and described in the Final EIS document. FDOT should carefully assess both indirect and cumulative effects on the surrounding area and the effect that this project has on resources of concern when selecting the preferred alternative.

The Final EIS should include the indirect and cumulative effects associated with the preferred alternative. It should also include avoidance, minimization and mitigation measures that will be utilized to help reduce indirect and cumulative effects. The Final EIS should provide the local communities with a better understanding of the land use changes that can be expected from implementation of the project. With this information, these communities can develop future land use plans and potential zoning regulations that could be enacted in concert with development of the transportation infrastructure. All factors, including direct, indirect and cumulative effects, must be evaluated and considered when determining the least environmentally-damaging practicable alternative that will fulfill the project purpose and need.